



SAFETY DATA SHEET

Date of Issue:

April 15, 2015

Section 1. Identification

Product Name: *Ricinus Communis* (castor bean) Agglutinin II (RCA₆₀, Ricin)

Catalog No.: L-1090

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

EU Supplier United Kingdom:

Vector Laboratories Ltd.
3 Accent Park
Bakewell Road, Orton Southgate
Peterborough, PE2 6XS, United Kingdom
Tel: (01733) 237999 Fax: (01733) 237119
Email: vector@vectorlabs.co.uk

Section 2. Hazards Identification

GHS Classification:

Acute toxicity, Oral - Category 2, H300
Acute toxicity, Dermal - Category 2, H310
Acute toxicity, Inhalation - Category 1, H330
Skin sensitization - Category 1, H317
Respiratory sensitization - Category 1, H334

GHS Label:



Signal Word: Danger

Hazard Statements:

H300 + H310 + H330 - Fatal if swallowed, in contact with skin or if inhaled.
H317 - May cause allergic skin reaction.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements:

Wear protective gloves/protective clothing. Wear respiratory protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice.

Section 3. Composition/Information on Ingredients

Component:	CAS#:	% by weight:
Ricinus Communis Agglutinin II	9009-86-3	<1%
Sodium azide	26628-22-8	<0.1%

(continued on next page)



Section 4. First Aid Measures

- Inhalation:** Remove to fresh air. Obtain medical attention.
- Skin contact:** Wash thoroughly with water for at least 15 minutes. Obtain medical attention.
- Eye contact:** Wash thoroughly with water for at least 15 minutes. Obtain medical attention.
- Ingestion:** Do not induce vomiting. If person is conscious, wash out mouth with water. Obtain medical attention.

Section 5. Fire Fighting Measures

- Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Special protective equipment:** Use respirator. Toxic gases can be evolved.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Wash contaminated area with 5% sodium hypochlorite (bleach). After mixing with 5% sodium hypochlorite, collect on absorbent material and dispose of according to federal, state and local environmental regulations.

Section 7. Handling and Storage

- Handling:** Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves.
- Storage:** Keep container tightly closed and store in a refrigerator.

Section 8. Exposure Controls/Personal Protection

- Exposure limits:** TLV 0.29 mg/m³ from ACGIH (sodium azide). Consult local authorities for acceptable exposure limits.
- Engineering controls:** Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.
- Personal protection:**
- Hand protection -** Compatible chemical-resistant gloves.
 - Eye protection -** Chemical safety goggles.
 - Skin protection -** Lab coat.

Section 9. Physical and Chemical Properties

- | | | | |
|-----------------------|----------------|--------------------------|----------------|
| Appearance: | Liquid | Flash point: | Not determined |
| Odor: | None | Autoflammability: | Not determined |
| pH: | Not determined | Vapor pressure: | Not determined |
| Boiling point: | Not determined | Relative density: | Not determined |
| Melting point: | Not determined | Solubility: | Not determined |

(continued on next page)



Section 10. Stability and Reactivity

Chemical stability: Stable under recommended storage conditions.

Conditions to avoid: Acidic pH, temperatures above 20 °C.

Materials to avoid: Strong oxidizers.

Hazardous reactions/decomposition products:

Carbon monoxide, carbon dioxide, nitrogen oxides.

Section 11. Toxicological Information

Acute effects:

May cause skin irritation, eye irritation, mucus membrane irritation. May be fatal if swallowed, inhaled or absorbed through the skin. Exposure can cause nausea, headache and vomiting.

Chronic effects:

May alter genetic material.

RTECS#: VJ2625000- Ricinus communis agglutinin II

Toxicity data: orl-hmn LDLo: 2 mg/kg
ipr-mus LD50: 4 µg/kg
ivn-mus LD50: 3 µg/kg

RTECS#: VY8050000 = Sodium azide

Toxicity data: orl-hmn TDLo: 710 µg/kg

Section 12. Ecological Information

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13. Disposal Considerations

Observe all federal, state and local environmental regulations.



Section 14. Transport Information

DOT (US): UN number: 3172 Class: 6.1 Packing group: 1
Proper shipping name: toxins, extracted from living sources, liquid, n.o.s.

IMDG: UN number: 3172 Class: 6.1 Packing group: 1
Proper shipping name: toxins, extracted from living sources, liquid, n.o.s.

IATA: UN number: 3172 Class: 6.1 Packing group: 1
Proper shipping name: toxins, extracted from living sources, liquid, n.o.s.

Section 15. Regulatory Information

SARA:

SARA 302 - No chemicals in this material are subject to the reporting requirements.

SARA 313 - This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established.

SARA 311/312 Hazards - Acute Health Hazard, Chronic Health Hazard

Risk phrases:

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed.

R32 - Contact with acids liberates very toxic gas.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S28 - After contact with skin, wash immediately with plenty of soap-suds.

S36 - WEar suitable protective clothing.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

California Prop. 65 components:

This product does not contain any chemicals known to the state of California to cause birth defects or other reproductive harm.

Section 16. Other Information

The information contained in this Material Safety Data is believed to be accurate but it is the responsibility of the user to determine the applicability of these data to the formulation of necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Material safety Data Sheet.

Date of Issue or Revision: April 15, 2015

Section Revised: N/A